### **TOYOTA MOTOR CORPORATION**

**EXECUTIVE ORDER A-014-0511** 

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

# IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	TEST GROUP	VEHICLE TYPE	EXHAUST EMISSION STANDARD CATEGORY	, ,	IL LIFE les)	IN- COMP (*=N/A or A/E=ex	MEDIATE USE LIANCE full in-use; h. / evap. late in-use)	FUEL TYPE			
2005	5TYXT02.4VMM	LDT: 3751-5750 Pounds LVW	USEPA Bin 9	EXH / ORVR	EVAP	EXH	EVAP	Gasoline (Tier 2			
Sec. Contractive process contractive			Counted as ARB ULEV	100K	150K	*	E	Unleaded)			
No.		SPECIAL FEATURES	EVAPORATIVE	EVAPORATIVE FAMILY (EVAF)				DISPLACEMENT (L)			
1	WU-TWC, TWO	C, HAFS, HO2S, SFI, OBD(P)	5TYXR0	165P21		··					
•		•									
*		*	•			2.4					
*		*	•								

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

### **BE IT FURTHER RESOLVED:**

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

#### **BE IT FURTHER RESOLVED:**

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

#### **BE IT FURTHER RESOLVED:**

That the listed vehicle models are federally certified, and are certified under the provisions of 13 CCR Section 1961(a)(14) and the incorporated test procedures.

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

Allen Yons, Chief

Mobile Source Operations Division



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New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

# **ATTACHMENT**

# EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

NMOG FLEET NMOG @ RA AVERAGE [g/mi] CH4 RAF =			NMOG or		maidenvoe:	L MEDSUIC	ilaie mener	· RAFBIA	chickly achies	mant fantai	~ 2/9 D (a/a	めりゅうべ ふんし	NOx=oxides o	-	
CERT	STD	NMOG NMHC		NMHC	I UOI-ROSK: 1	RL [g/mi]≕ru (≠1000 miles	nning loss:	URVR Id/a	Blion diene	ased]=an-hr	ile: Per brec	00 10000 PM	CHARL MAR	ram; mg=mili	gram
	0.076		CERT [g/mi]	PC   Fordame 27	mii CO [	CO [g/ml] NOx [g/ml]		)x [g/ml]	Н	HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]	
			[Shun3		CERT	STD	CERT	STI	CE	RT S	TD	CERT	STD	CERT	STD
	@ 50K	0.040	•	0.075	0.3	3.4	0.04	0.2	:	* .	15.	*	*	0.04	0.27
	@ UL	0.050	*	0.090	0.4	4.2	0.05	0.3		• .	18.	•	•	0.05	0.40
	@ 50°F & 4K	*	•	*	•	•	•	•		•	•	•	*	•	*
CO [g/mi]			V-1047,414	NMHC+No (comp		CO [( comp			:+NOx [US06]		[g/mi] 306]		+NOx [8C03]		[g/mi] 203]
@ 20	*F & 50K			CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
CERT	2.0		000 miles	•	*	*	•	0.06	0.25	2.7	10.5	0.03	0.27	0.01	3.5
STD	12.5	SFTP	@ 100000	0.08	1.03	*	*	*	•	2.8	14.6			0.2	49

Evaporative Family	3-Days Diurnal + Hot Soak (grams/test) @ UL		2-Days Diurnal + Hot Soak (grams/test) @ UL		Runnin (grams/m		On-Board Refueling Vapor Recovery (grams/gallon) @ UL		
	CERT	STD	CERT	STD	CERT	STD	CERT	STD	
5TYXR0165P21	0.24	0.65	0.25	0.85	0.005	0.05	0.04	0.20	
*	*	*	*	*	•	*	*		
•	•	*	*	*	*	*		*	
•	*	*		•	*	*	<b> </b>	-	

2.8 14.6

\* = not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=uitra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust gas recirculation; AIR=secondary air injection; PAIR=pulsed AIR; MFI= multiport fuel injection; SFI=sequential MFI; TBI=throttle body injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefled natural gas; LPG=liquefled petroleum gas; E85="85%" Ethanol Fuel

## 2005 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL.	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	INTERMEDIATE IN-USE COMPLIANCE ("=NIA or full in-use; A/E=exh. / evap. Intermediate in-use)		PHASE-IN STD.	OBD II
					EXH	EVAP		
TOYOTA	HIGHLANDER 2WD	5TYXR0165P21	1	2.4	*	E	SFTP	Partial
TOYOTA	HIGHLANDER 4WD	5TYXR0165P21	1	2.4	* .	E	SFTP	Partial